

**Remarks/Arguments:**

**I. Status**

The Office Action dated July 26, 2007 (the "Office Action"), has been carefully reviewed. Claims 1, 8, 9, 12 and 14 have been amended and claim 3 has been deleted. Accordingly, claims 1-2 and 8-18 are pending in this application. Reconsideration of this application is respectfully requested.

**II. 35 U.S.C. § 102 Rejections.**

Claims 1-2 and 8-18 were rejected under 35 U.S.C. § 102 as being unpatentable over U.S. Patent No. 7,179,295 to Kovacevic (hereinafter "Kovacevic"). Reconsideration of these claims in view of the following remarks is respectfully requested.

*Discussion Re: Patentability of Claim 1*

**1. Claim 1**

Claim 1 has been amended to include the limitation of "a plurality of support posts" which "have a diameter that is about 1/3 the diameter of the corresponding one of said plurality of cavities."

**2. Kovacevic Does Not Disclose Large Support Posts**

The Examiner did not specifically identify any disclosure in Kovacevic of a support post that is about 1/3 the diameter of the corresponding cavity and the Applicants have not been able to find any discussion in Kovacevic of the size of the support post.

Additionally, the drawings show the support posts 450 to be significantly less than  $1/3$  the diameter of the cavities (see, e.g., FIG. 30). Thus, while Applicants do not take the position that the drawings of Kovacevic are to scale, to the extent Kovacevic discloses any detail as to the size of the support posts, such disclosure is of a very small diameter support post.

### 3. Conclusion

Anticipation under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Since Kovacevic does not disclose support posts that “have a diameter that is about  $1/3$  the diameter of the corresponding one of said plurality of cavities,” Kovacevic does not disclose each element recited in claim 1. Accordingly, the Applicants respectfully submit that the rejection of claim 1 under 35 U.S.C. § 102 should be withdrawn.

### *Discussion Re: Patentability of Claim 2*

Claim 2 depends from claim 1 and includes the limitations discussed above with respect to claim 1 and additional limitations. Accordingly, for at least the same reasons set forth above with respect to claim 1, claim 2 is patentable over the prior art.

*Discussion Re: Patentability of Claim 8*

1. Claim 8

Claim 8 recites a strain gage pair with “an inner gage mounted on said diaphragm adjacent the center of said circular diaphragm” and that “said inner gage is positioned to span said maximum magnitude radial location.”

2. Kovacevic Does Not Disclose Centrally Located Strain Gages

The Examiner has generally cited to Kovacevic at column 8, lines 57-67 for disclosure of a centrally located strain gage. Respectfully, Kovacevic does not disclose the limitations of claim 8.

Specifically, Kovacevic at column 8, lines 57-67 only discloses the use of an “x” configuration. There is no discussion regarding the placement of the strain gages other than the use of an orthogonal arrangement. Moreover, to the extent that they may be relied upon, the drawings of Kovacevic show the strain gages 460 are spaced apart from the center of the cavities (see, e.g., FIG. 30 wherein the gages 460 are spaced apart from the support posts 450 which are located at the center of the cavities).

Additionally, Kovacevic fails to identify the location of any maximum magnitude strain for the configuration disclosed. Thus, Kovacevic cannot disclose positioning a strain gauge over such a location.

3. Conclusion

Anticipation under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Since Kovacevic does not disclose a

strain gage pair with “an inner gage mounted on said diaphragm adjacent the center of said circular diaphragm” and that “said inner gage is positioned to span said maximum magnitude radial location,” Kovacevic does not disclose each element recited in claim 8. Accordingly, the Applicants respectfully submit that the rejection of claim 8 under 35 U.S.C. § 102 should be withdrawn.

*Discussion Re: Patentability of Claim 9*

1. Claim 9

Claim 9 recites a strain gage pair with “an outer gage mounted on said diaphragm immediately adjacent said outer wall of said cylindrical cavity” and that “said outer gage is positioned between said zero-crossing point and said outer wall.”

2. Kovacevic Does Not Disclose Centrally Located Strain Gages

The Examiner has generally cited to Kovacevic at column 8, lines 57-67 for disclosure of an outwardly positioned strain gage. Respectfully, Kovacevic does not disclose the limitations of claim 9.

Specifically, Kovacevic at column 8, lines 57-67 only discloses the use of an “x” configuration. There is no discussion regarding the placement of the strain gages other than the use of an orthogonal arrangement. Moreover, to the extent that they may be relied upon, the drawings of Kovacevic show the strain gages 460 are spaced apart from the walls of the cavities (see, e.g., FIG. 30 wherein the gages 460 are spaced apart from the outer walls).

Additionally, Kovacevic fails to identify the location of any zero magnitude strain for the configuration disclosed. Thus, Kovacevic cannot disclose positioning a strain gauge between such a location and an outer wall.

### 3. Conclusion

Anticipation under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Since Kovacevic does not disclose a strain gage pair with “an outer gage mounted on said diaphragm immediately adjacent said outer wall of said cylindrical cavity” and that “said outer gage is positioned between said zero-crossing point and said outer wall,” Kovacevic does not disclose each element recited in claim 9. Accordingly, the Applicants respectfully submit that the rejection of claim 9 under 35 U.S.C. § 102 should be withdrawn.

### *Discussion Re: Patentability of Claims 10-11*

Claims 10-11 depend from claim 9 and include the limitations discussed above with respect to claim 9 and additional limitations. Accordingly, for at least the same reasons set forth above with respect to claim 9, claims 10-11 are patentable over the prior art.

*Discussion Re: Patentability of Claim 12*

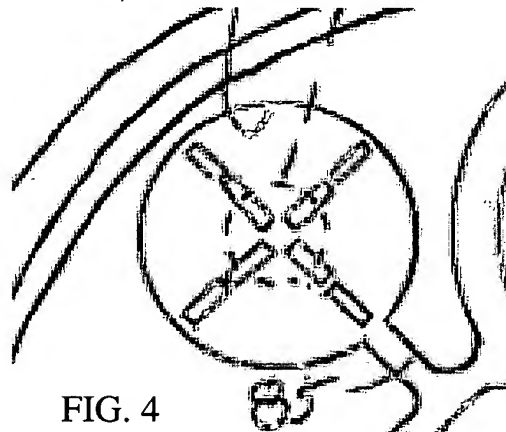
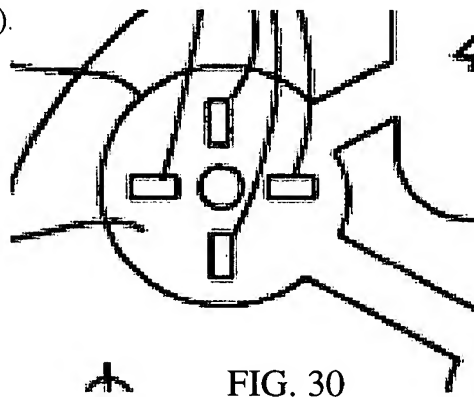
1. Claim 12

Claim 12, as amended, recites that “each of said four pairs of strain gages is aligned in one of two radial planes that are at about 45 degrees relative to said sagittal plane.”

2. Kovacevic Does Not Disclose Radially Aligned Strain Gauges as Claimed

The Examiner cited to Kovacevic at column 9, lines 1-21 for disclosing wire channels that are set at about 45 degrees relative to a parallel plane. Claim 12 has been amended to clarify that the *strain gages* are set at a 45 degree angle relative to the *sagittal* plane.

Specifically, Kovacevic at column 9, lines 1-21 discusses the orientation of the sensors 460 with respect to the channels 470 which is 45 degrees (see also Kovacevic at FIG. 30). Claim 12, however, recites the orientation of the strain gages relative to the knee joint when the device is implanted. Thus, while the strain gages of Kovacevic are oriented at 0 or 90 degrees to the sagittal plane (see, e.g., excerpt of Kovacevic at FIG. 30, set forth below), claim 12 requires the strain gages to be at about 45 degrees relative to the sagittal plane (see, e.g., excerpt of FIG. 4 of the Applicants' specification set forth below).



3. Conclusion

Anticipation under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Since Kovacevic does not disclose a strain gage pair set at a 45 degree angle relative to the sagittal plane as recited in claim 12, Kovacevic does not disclose each element recited in claim 12. Accordingly, the Applicants respectfully submit that the rejection of claim 12 under 35 U.S.C. § 102 should be withdrawn.

*Discussion Re: Patentability of Claim 13*

Claim 13 depends from claim 12 and includes the limitations discussed above with respect to claim 12 and additional limitations. Accordingly, for at least the same reasons set forth above with respect to claim 12, claim 13 is patentable over the prior art.

*Discussion Re: Patentability of Claim 14*

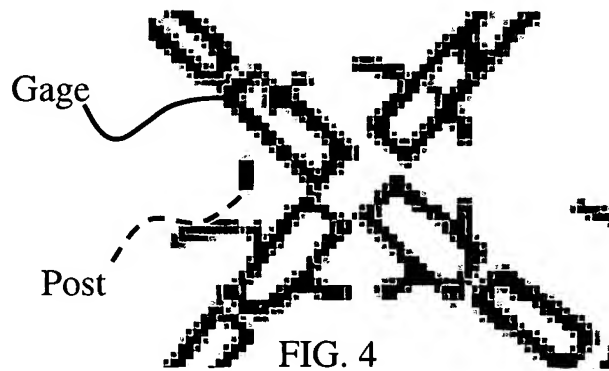
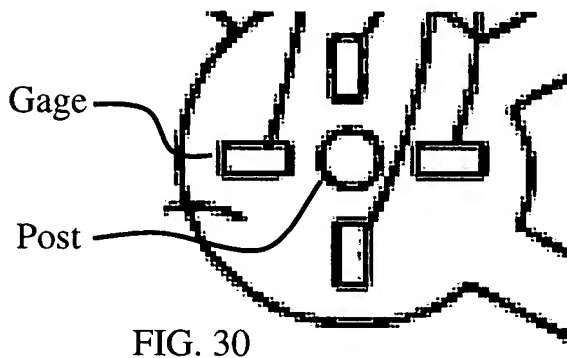
1. Claim 14

Claim 14 recites a strain gage pair with “an inner gage positioned such that at least a portion of the inner gauge is mounted at a location on one side of the diaphragm directly opposite to where a portion of the corresponding one of the plurality of support posts contacts the other side of the diaphragm.”

2. Kovacevic Does Not Disclose Centrally Located Strain Gages

The Examiner has generally cited to Kovacevic at column 9, lines 1-21 for disclosure of the above identified element of claim 14. Respectfully, Kovacevic does not disclose the elements of claim 14.

Specifically, Kovacevic at column 9, lines 1-21 only discloses the use of an “x” configuration. There is no discussion regarding the placement of the strain gages other than the use of an orthogonal arrangement. Moreover, the drawings of Kovacevic clearly show the strain gages 460 spaced apart from the portion of the diaphragm directly opposite to the support post 450 (see, e.g., FIG. 30 set forth below). In contrast, claim 14 recites a gage that is “directly opposite” to the support post. (See, e.g., FIG. 4 below).



A gage that is *offset* from the part of a diaphragm contacted by a support post is not the same as a gage that is *placed upon* the part of a diaphragm contacted by a support post.

3. Conclusion

Anticipation under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Since Kovacevic does not disclose a strain gage pair with “an inner gage positioned such that at least a portion of the inner gauge is mounted at a location on one side of the diaphragm directly opposite to where a



portion of the corresponding one of the plurality of support posts contacts the other side of the diaphragm" as recited in claim 14, Kovacevic does not disclose each element recited in claim 14. Accordingly, the Applicants respectfully submit that the rejection of claim 14 under 35 U.S.C. § 102 should be withdrawn.

*Discussion Re: Patentability of Claims 15-18*

Claims 15-18 depend from claim 14 and include the limitations discussed above with respect to claim 9 and additional limitations. Accordingly, for at least the same reasons set forth above with respect to claim 14, claims 15-18 are patentable over the prior art.

**IV. Conclusion**

Applicant respectfully requests entry of the amendments and favorable consideration of the application.

A prompt and favorable action on the merits is requested.

Respectfully Submitted,  
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